

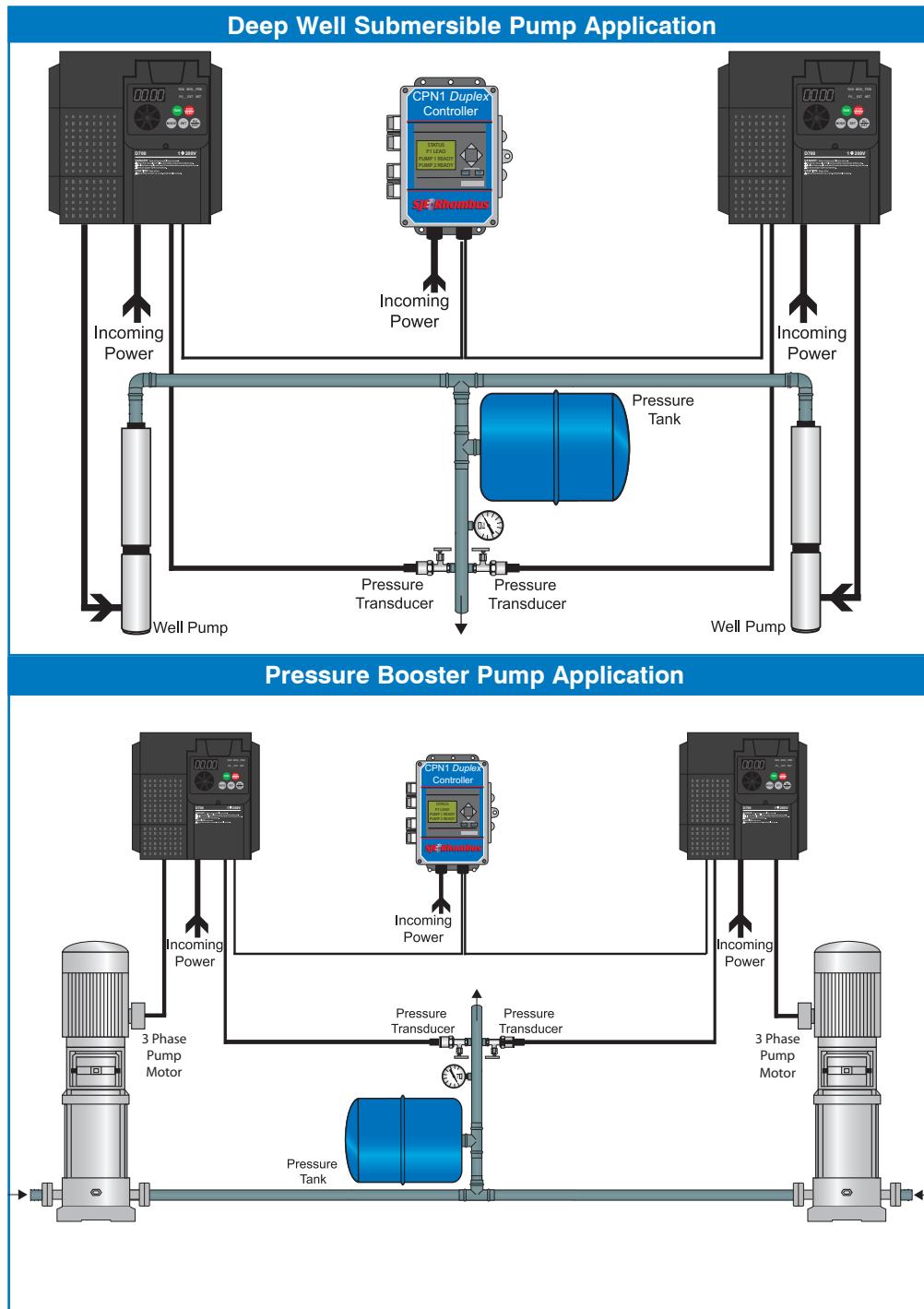
# CPN1 Duplex Controller

## Quick Start Manual for Constant Pressure Applications

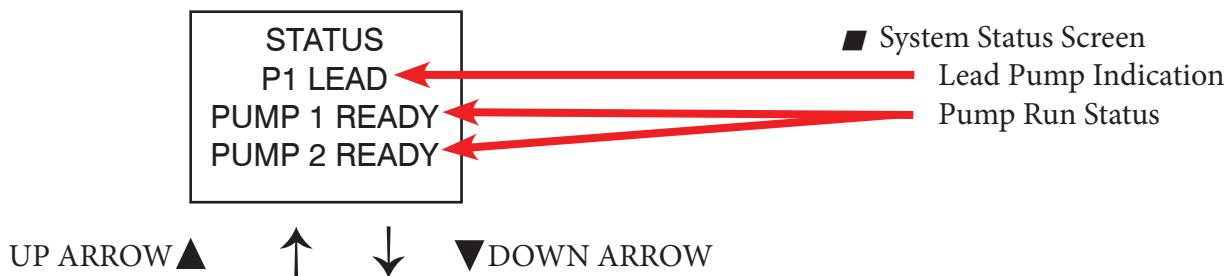
The CPN1 Duplex Controller is designed to alternate the lead control of two SJE-Rhombus CPN1 or CP3R panels, based on the accumulated run time of each variable frequency drive.

The CPN1 Duplex Controller also controls the lag pump operation in the duplex system, so as to maintain the operating pressure under high demand.

The CPN1 Duplex Controller is designed for indoor installations only.



## Display and Keypad



### Changing Lead Shift Hours

Press ESC+UP/DOWN arrows to increment/decrement the hours before the lead pump control is shifted to the other drive.

### Manual Lead Shift

Press ESC+RIGHT arrow to manual shift the lead pump control to the other drive.

## CPN1/CP3R Applicable Parameter List for Duplex Operation

| PARAMETERS | DESCRIPTION                | RANGE     | DEFAULT | TYPICAL |
|------------|----------------------------|-----------|---------|---------|
| P. 42      | Output Frequency Detection | 0 to 60Hz | 35      | 35      |
| P. 132     | PID Lower Limit            | 0 to 100% | 50.0    | 50.0    |

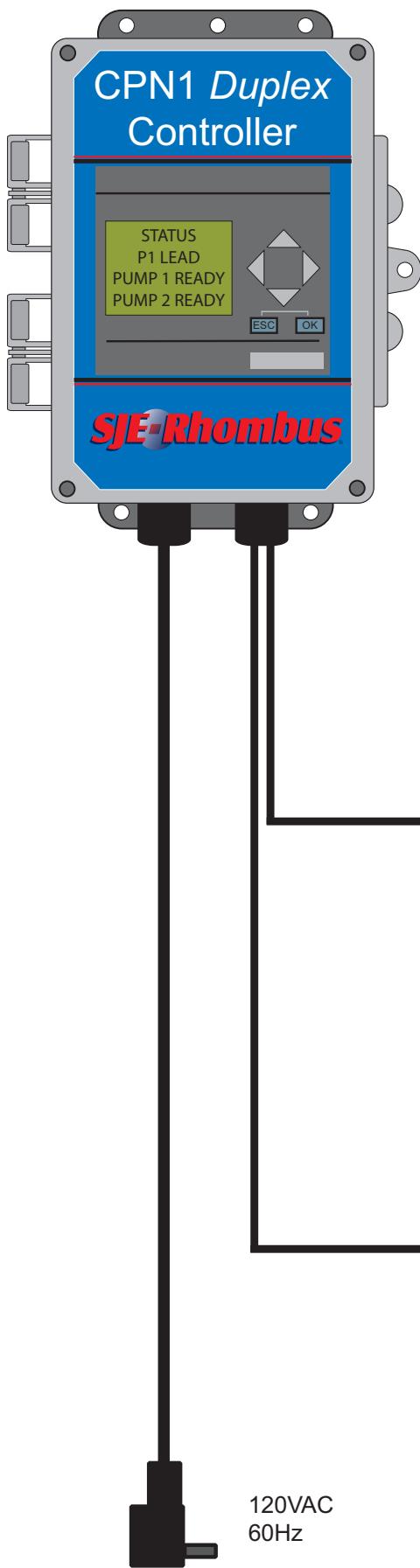
### **Output Frequency Detection: (P.42)**

The output frequency detection should be set to the frequency below which the lead drive in the duplex system calls for the lag drive to stop operation. This is typically going to be set at or just above the sleep frequency of the lead drive. Parameter must be changed on each CPN1 or CP3R drive.

### **PID Lower Limit: (P.132)**

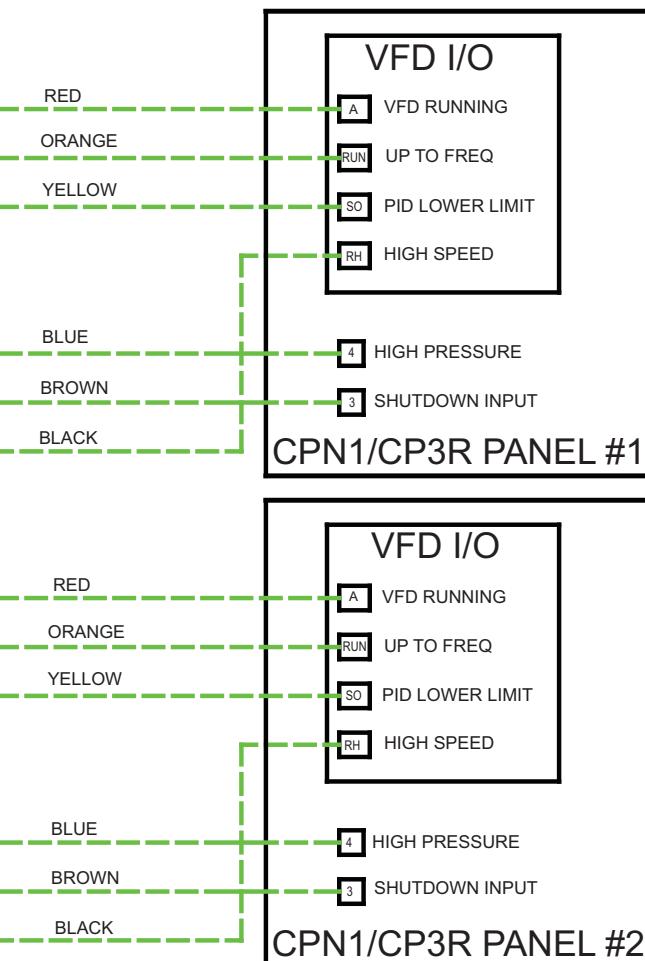
The PID lower limit should be set to the pressure below which the lead drive in the duplex system calls for the lag drive to start operation. This is typically set below the pressure at which the lead drive starts after sleep mode. Parameter must be changed on each CPN1 or CP3R drive.

# Terminal Connections —



CPN1 1.5 & 3 HP PANELS

CP3R 1.5, 3 & 5HP PANELS



\*IF A HIGH PRESSURE SHUTDOWN SWITCH IS USED, CONNECT THE BLUE AND BROWN WIRES IN SERIES WITH THE SHUTDOWN.

**NOTES:** \_\_\_\_\_



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